

ABSTRACT OF THE INVENTION

A system and method for rasterization an image on a display through approximation, wherein the image is decomposed into a plurality of convex polygons, each convex polygon being defined by a plurality of original edges and each original edge being defined by two vertices. The coordinates of original vertices of an original edge are truncated, and the truncated coordinates are used to generate modified coordinates that define a modified edge. A plurality of modified edges defines a potentially changing region. If a selected region of a display device intersects this potentially changing region defined by the modified edges, then the first selected region is refreshed on the display device.